ELSEVIER

Journal of Membrane Science 113 (1996) 391–392

journal of MEMBRANE SCIENCE

Contents

Special Issue: Selected papers presented at the Seventh International Symposium on Synthetic Membranes in Science and Industry, Tübingen, Germany, 29 August–1 September 1994

Guest Editorial vii

Dehydration of organic compounds with SYMPLEX composite membranes
N. Scharnagl, K.-V. Peinemann, A. Wenzlaff, H.-H. Schwarz and R.-D. Behling (Geesthacht, Germany) 1
Controlled release of theophylline from water-swollen scleroglucan matrices
A. Adrover (Roma, Italy), M. Giona (Cagliari, Italy), M. Grassi, R. Lapasin and S. Pricl (Trieste, Italy) 7
Analysis of controlled release in disordered structures: a percolation model
A. Adrover (Roma, Italy), M. Giona (Cagliari, Italy) and M. Grassi (Trieste, Italy) 21
Dehydration of organics by pervaporation with polyelectrolyte complex membranes: some considerations concerning the separation mechanism
K. Richau, H.-H. Schwarz, R. Apostel and D. Paul (Teltow-Seehof, Germany) 31
Transport resistances during pervaporation through a composite membrane: experiments and model calculations
E. Bode and C. Hoempler (Coburg, Germany) 43
The analysis of sorption data of organic vapors in polymeric membranes through novel theories
E.F. Castro, E.E. Gonzo and J.C. Gottifredi (Buenos Aires, Argentina) 57
Modelling of long-term photoresponse of bacteriorhodopsin immobilized on cellulose acetate membranes
V. Sediroglu, A. Aydemir, U. Gündüz, M. Yücel, L. Türker and I. Eroglu (Ankara, Turkey) 65
Electrodialysis in a non-aqueous medium: production of sodium methoxide
S. Sridhar (Marl, Germany) 73
Hybrid process using pervaporation for the removal of organics from process and waste water
K. Meckl and R.N. Lichtenthaler (Heidelberg, Germany) 81
Computer-aided design and optimisation of membrane formulations
J.T. Guthrie and L. Lin (Leeds, United Kingdom) 87
A membrane reactor for methanol synthesis
R.P.W.J. Struis, S. Stucki and M. Wiedorn (Villigen, Switzerland) 93
Flow sensing at the endothelial cell membrane–blood interface
G. Siegel (Berlin, Germany), M. Malmsten (Stockholm, Sweden) and A. Schmidt (Münster, Germany) 101
Separation of a CO_2/H_2 gas mixture under high pressure with polyethylene terephthalate membranes
G. Härtel, F. Rompf and T. Püschel (Freiberg, Germany) 115
Transport parameters of carbon dioxide in poly(etheretherketone) membranes
F. Lufrano, E. Drioli, G. Golemme (Arcavacata di Rende, Italy) and L. Di Giorgio (Roma, Italy) 121
Preparation of food emulsions using a membrane emulsification system
R. Katoh, Y. Asano, A. Furuya, K. Sotoyama and M. Tomita (Kanagawa-ken, Japan) 131
Clustering of solvents in membranes and its influence on membrane transport properties
Q.T. Nguyen, E. Favre (Nancy, France), Z.H. Ping (Shanghai, P.R. China) and J. Néel (Nancy, France) 137
Synthesis, characterization and transport properties of a new siloxane-phosphazene copolymer. Extraction of *n*-butanol from water by pervaporation
D. Roizard, R. Clément, P. Lochon (Nancy, France), J. Kerres and G. Eigenberger (Stuttgart, Germany) 151
Structure and sorption characteristics of bioaffinity membranes
I.A. Chernova and K.Ya. Gurevich (St. Petersburg, Russian Federation) 161

Meetings calendar 169

Special Issue: Selected papers presented at the Second International Symposium Progress in Membrane Science and Technology, Enschede, The Netherlands, 27 June–1 July 1994

Guest Editorial 173

Diffusion coefficients of Br_2 in cation exchange membranes
A. Heintz and C. Illenberger (Heidelberg, Germany) 175
Effects of functional group and operating temperature on the separation of pyridine–water mixture by pervaporation
B.-K. Oh and Y.M. Lee (Seoul, South Korea). 183
Electrokinetic phenomena in microporous membranes with a fixed transverse charge distribution
V. Aguilella, M. Aguilella-Arzo and P. Ramírez (Castellón, Spain) 191
Relaxation phenomena in dense, glassy membranes prepared from a polymer solution, monitored by changes in dielectric properties
R.H.B. Bouma, Th. van den Boomgaard, C.A. Smolders, H. Strathmann and P.F. Mijnlieff (Enschede, Netherlands). 205
Phase transitions during membrane formation of polylactides. I. A morphological study of membranes obtained from the system polylactide–chloroform–methanol
P. van de Witte, H. Esselbrugge, P.J. Dijkstra, J.W.A. van den Berg and J. Feijen (Enschede, Netherlands) 223
Neosepta microporous ion-exchange membranes in dialysis desalination of immunoglobulin fraction of mouse ascitic fluids
G. Tishchenko, M. Bleha, J. Škvor, L. Bureš (Prague, Czech Republic), Y. Mizutani and N. Ohmura (Tokuyama City, Japan) . . 237
A comparison between polysulfone, zirconia and organo-mineral membranes for use in ultrafiltration
W. Doyen, W. Adriansens, B. Molenberghs and R. Leysen (Mol, Belgium). 247
Non-aqueous retention measurements: ultrafiltration behaviour of polystyrene solutions and colloidal silver particles
M.A.M. Beerlage, M.L. Heijnen, M.H.V. Mulder, C.A. Smolders and H. Strathmann (Enschede, Netherlands) 259
Use of nonporous polymeric flat-sheet gas-separation membranes in a membrane-liquid contactor: experimental studies
D.G. Bessarabov, E.P. Jacobs, R.D. Sanderson (Stellenbosch, South Africa) and I.N. Beckman (Moscow, Russian Federation) . . 275
Implementing membrane technology in the process industry: problems and opportunities
G.W. Meindersma and M. Kuczynski (Geleen, Netherlands) 285
Transport properties of alkanes through ceramic thin zeolite MFI membranes
Z.A.E.P. Vroon, K. Keizer, M.J. Gilde, H. Verweij and A.J. Burggraaf (Enschede, Netherlands) 293
Microfiltration of very dilute colloidal mixtures
S.S. Madaeni and A.G. Fane (Sydney, NSW, Australia) 301
Vapour permeation for the recovery of organic solvents from waste air streams: separation capacities and process optimization
M. Leemann, G. Eigenberger (Stuttgart, Germany) and H. Strathmann (Enschede, Netherlands) 313
A water vapor-permeable membrane from block copolymers of poly(butylene terephthalate) and polyethylene oxide
B. Gebben (Arnhem, Netherlands). 323
The production of flocs for water treatment by electrodialysis in a diaphragm cell
D.A. White and J. Helbig (London, United Kingdom) 331
Separation of protium/deuterium and oxygen-16/oxygen-18 by membrane distillation
G. Zakrzewska-Trznadel, A.G. Chmielewski (Warszawa, Poland) and N.R. Miljević (Belgrade, Yugoslavia) 337
Effect of the addition of ZrO_2 to polysulfone based UF membranes
I. Genné, S. Kuypers and R. Leysen (Mol, Belgium) 343
Liquid membrane technology for the separation of racemic mixtures
J.T.F. Keurentjes, L.J.W.M. Nabuurs and E.A. Vegter (Arnhem, Netherlands) 351
Recent advances in the formation of phase inversion membranes made from amorphous or semi-crystalline polymers
I.M. Wienk, R.M. Boom, M.A.M. Beerlage, A.M.W. Bulte, C.A. Smolders and H. Strathmann (Enschede, Netherlands) 361
Immobilized enzyme membranes for phenol and cyanide decomposition
M. Bodzek, J. Bohdziewicz and M. Kowalska (Gliwice, Poland) 373

Meetings calendar 385
Author Index 387
Subject Index 389
Contents 391